

Notice of Allowability

Application No.

10/070,355

Examiner

Lee Fineman

Applicant(s)

KLEINBERGER ET AL.

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/31/06.
2. ☒ The allowed claim(s) is/are 16, 25-28, 30-33, 56-59 and 61-72.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Martin Moynihan on 30 October 2006.

The application has been amended as follows:

Please amend the claims as follows:

25. (Currently Amended) A system for providing autostereoscopic viewing to a viewer, comprising;

(a) a pixilated display for displaying a uniformly polarized combined image of left and right image picture elements of left and right images;

(b) a first birefringent layer having individually switchable elements being positioned in front of said display and serving for re-dividing said uniformly polarized combined image by controlled partial light rotation of light emanating from each of picture elements of said combined images, thereby constructing a second intermediate image wherein in said first regions intensity of a light component oriented in a first orientation A reproduces light intensity of a corresponding picture element of said left image and a light component oriented in a second orientation B orthogonal to A reproduces light intensity of a corresponding picture element of said right image, and wherein in said second regions a light component oriented in said second orientation B reproduces light intensity of a corresponding picture element of said left image and

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a light component oriented in said first orientation A reproduces light intensity of a corresponding picture element of said right image;

(c) a second layer at least some portions of which are birefringent, positioned between said viewer and said first birefringent layer; and

(d) a uniform polarizer positioned between said viewer and said second birefringent layer;

the system being operable to provide autostereoscopic viewing to a viewer at a position, each of said viewer's right and left eyes seeing, simultaneously, an appropriate image, at full pixel resolution of said display.

64. (Currently Amended) The system of claim [[16]] 70, wherein said control element is further operable to communicate with said first optical construction.

Allowable Subject Matter

2. Claims 16, 25-28, 30-33, 56-59 and 61-72 allowed.

3. The following is an examiner's statement of reasons for allowance:

Claims 16, 25-28, 30-33, 56-59 and 61-72 are allowable over the prior art for at least the reason that the prior art fails to teach and/or suggest a system for autostereoscopic vision "said [first] birefringent layer is positioned in front of said display and comprises an array of individually switchable elements each operable to rotate light passing therethrough to a selected degree, said birefringent layer being operable to re-divide said uniformly polarized combined

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image by controlled partial light rotation of light emanating from each of picture elements of said combined images, thereby constructing a second intermediate image wherein in said first regions intensity of a light component oriented in a first orientation A reproduces light intensity of a corresponding picture element of said left image and a light component oriented in a second orientation B orthogonal to A reproduces light intensity of a corresponding picture element of said right image, and wherein in said second regions a light component oriented in said second orientation B reproduces light intensity of a corresponding picture element of said left image and a light component oriented in a first orientation A reproduces light intensity of a corresponding picture element of said right image" as set forth in the claimed combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LAF
30 October 2006


MARK A. ROBINSON
PRIMARY EXAMINER